**PATENT** 

**DOCKET NO.:** CRNT-0008 **Application No.:** 09/765,910

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This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

- 1. (Canceled)
- 2. (Canceled)
- 3. (Canceled)
- 4. (Canceled)
- 5. (Canceled)
- 6. (Canceled)
- 7. (Canceled)
- 8. (Canceled)
- 9. (Canceled)
- 10. (Canceled)
- 11. (Currently Amended) The method of claim 37, wherein the <u>first</u> power line communications repeater comprises a router.
- 12. (Previously Presented) The method of claim 37, wherein the first power line communications repeater prevents data associated with a second subscriber from entering the first subscriber premises.
- 13. (Previously Presented) The method of claim 37, wherein the first filter is coupled to the first electrical power line on the subscriber side of an electrical power meter.
- 14. (Previously Presented) The method of claim 37, wherein the first filter is coupled to the first electrical power line on the electrical transformer side of an electrical power meter.

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15. (Previously Presented) The method of claim 37, wherein the first power line communications repeater is connected across both the first filter and an

electrical power meter.

16. (Canceled)

17. (Canceled)

18. (Currently Amended) The method of claim 37, further comprising communicatively coupling the first power line communications repeater to a data network, and wherein the data network provides the data signals.

19. (Previously Presented) The method of claim 18, wherein the data network is a wide area network.

20. (Previously Presented) The method of claim 18, wherein the data network is in communication with the first electrical power line on the transformer side of the first filter.

21. (Previously Presented) The method of claim 11, wherein the router is in communication with a plurality of subscribers.

- 22. (Canceled)
- 23. (Canceled)
- 24. (Canceled)

25. (Previously Presented) The method of claim 37, wherein the first filter is conductively connected to the first electrical power line.

- 26. (Previously Presented) The method of claim 37, wherein the first filter is inductively coupled to the first electrical power line.
  - 27. (Previously Presented) The method of claim 26, wherein the first filter

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comprises a toroid through which the first electrical power line passes.

28. (Canceled)

29. (Canceled)

30. (Previously Presented) A system for providing network

communications to subscriber devices at a plurality of subscriber premises, a

branch line connecting each subscriber premises to an electric power distribution

transformer, the system comprising:

a router communicatively coupled to the plurality of branch lines at a node to

control data communications for the subscriber premises;

a plurality of low pass filters with each said low pass filter coupled to a

different branch line on the electric power distribution transformer side of the node;

and

wherein each filter prevents the flow of data signals through the branch line

and permits the flow of power signals through the branch line.

31. (Canceled)

32. (Currently Amended) A method of providing data communications in a

power line communication network that comprises a first branch line connected to a

first subscriber premises through an electric power meter and a second branch line

connected to a second subscriber premises and to the first branch line, the method

comprising:

establishing a wide area network (WAN) that comprises the first branch

line;

coupling a low pass filter to the first branch line on the first subscriber

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side of the power meter;

coupling a first port of a power line communications repeater to the first branch line on a first side of the filter:

coupling a second port of the power line communications repeater to the first branch line on a second side of the filter; and

wherein the low pass filter attenuates high frequency noise traversing the first branch line.

- 33. (Previously presented) The method of claim 32, wherein the power line communications repeater is connected across both the low pass filter and the power meter.
- 34. (Currently Amended) A method of providing data communications in a power line communication network that comprises a first branch line connecting a distribution transformer to a first subscriber premises through an electric power meter and a second branch line connecting a second subscriber premises to the first branch line at a juncture of the first and second branch lines, the method comprising:

coupling a low pass filter to the first branch line between the juncture and the power meter;

coupling a first port of a power line communications repeater to the first branch line on a first side of the filter;

coupling a second port of the power line communications repeater to the first branch line on a second side of the filter; and

establishing a wide area network (WAN) that comprises the first branch

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line; and

wherein the low pass filter attenuates high frequency noise traversing the first branch line.

35. (Previously presented) The method of claim 34, wherein the power line communications repeater is connected across both the low pass

filter and the power meter.

36. (Currently Amended) A method of isolating data in a power line

communication network that comprises a first branch line connected to a first

subscriber premises through an electric power meter and a second branch

line connecting a second subscriber premises to the first branch line at a

juncture of the first and second branch lines, the method comprising:

coupling a low pass filter to the first branch line between the first

subscriber premises and the juncture; and

coupling a power line communications repeater to the first branch line

across both the low pass filter and the power meter; and

wherein the low pass filter attenuates the high frequency noise entering the

first subscriber premises via the first branch line; and

wherein the power line communications repeater prevents data transmitted

from the second subscriber premises from entering the first subscriber premises.

37. (Previously Presented) A method of providing data communications over

an electrical distribution system comprising an electrical distribution transformer, the

electrical distribution transformer being coupled to a first and second electrical power

lines, which are coupled to a first and second subscriber premises, respectively, and

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wherein said first and second power lines are coupled to each other at a juncture, the method comprising:

coupling a first filter to the first electrical power line between the juncture and the first subscriber premises;

coupling a second filter to the second electrical power line between the juncture and the second subscriber premises, wherein the first and second filters attenuate the flow of data signals through the electrical power line and permit the flow of power signals through the electrical power line;

communicatively coupling a first power line communications repeater to the first electrical power line across the first filter; and

communicatively coupling a second power line communications repeater to the second electrical power line across the second filter.

- 38. (Previously Presented) The system of claim 30, wherein said low pass filters each comprise at least two components selected from the following group: capacitor, inductor, and resistor.
- 39. (Previously Presented) The system of claim 30, wherein said low pass filters each comprise a common mode choke.
- 40 (Currently Amended) The system of claim 30, wherein said low pass filter filters each comprise a ferrite toroid.
  - 41. (Canceled)
- 42. (Previously Presented) The method of claim 32, wherein the low pass filter comprises at least two components selected from the following group: capacitor, inductor, and resistor.

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43. (Currently Amended) The method of claim 42, wherein coupling the low pass filter comprises cutting disconnecting the first branch line.

- 44. (Previously Presented) The method of claim 32, wherein the low pass filter comprises a common mode choke.
- 45. (Currently Amended) The method of claim 32, wherein coupling the low pass filter comprises disposing a ferrite toroid substantially around the circumference of the first power branch line.
- 46. (Previously Presented) The method of claim 32, wherein the power line communications repeater prevents data transmitted from the second subscriber premises from entering the first subscriber premises.
  - 47. (Cancelled)
- 48. (Previously Presented) The method of claim 34, wherein the low pass filter comprises at least two components selected from the following group: capacitor, inductor, and resistor.
- 49. (Currently Amended) The method of claim 48, wherein coupling the low pass filter comprises cutting disconnecting the first branch line.
- 50. (Previously Presented) The method of claim 34, wherein the low pass filter comprises a common mode choke.
- 51. (Currently Amended) The method of claim 34, wherein coupling the low pass filter comprises disposing a ferrite toroid substantially around the circumference of the first <a href="mailto:power-branch">power-branch</a> line.
- 52. (Previously Presented) The method of claim 34, wherein the power line communications repeater prevents data transmitted from the second subscriber

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premises from entering the first subscriber premises.

53. (Cancelled)

54. (New) A method of providing data communications in a power line communication network that comprises a first branch line connected to a first subscriber premises through an electric power meter and a second branch line connected to a second subscriber premises and to the first branch line, the method comprising:

coupling a low pass filter to the first branch line on the first subscriber side of the power meter;

coupling a first port of a power line communications repeater to the first branch line on a first side of the filter;

coupling a second port of the power line communications repeater to the first branch line on a second side of the filter; and

wherein the low pass filter comprises a common mode choke that attenuates high frequency noise traversing the first branch line.

- 55. (New) The method of claim 54, wherein the power line communications repeater is connected across both the low pass filter and the power meter.
- 56. (New) The method of claim 54, wherein coupling the low pass filter comprises disconnecting the first branch line.
- 57. (New) The method of claim 54, wherein coupling the low pass filter comprises disposing a ferrite toroid substantially around the circumference of the first branch line.

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58. (New) The method of claim 54, wherein the power line communications repeater prevents data transmitted from the second subscriber premises from entering the first subscriber premises.

59. (New) A method of providing data communications in a power line communication network that comprises a first branch line connecting a distribution transformer to a first subscriber premises through an electric power meter and a second branch line connecting a second subscriber premises to the first branch line at a juncture of the first and second branch lines, the method comprising:

coupling a low pass filter to the first branch line between the juncture and the power meter;

coupling a first port of a power line communications repeater to the first branch line on a first side of the filter:

coupling a second port of the power line communications repeater to the first branch line on a second side of the filter; and

wherein the low pass filter comprises a common mode choke that attenuates high frequency noise traversing the first branch line.

- 60. (New) The method of claim 59, wherein the power line communications repeater is connected across both the low pass filter and the power meter.
- 61. (New) The method of claim 59, wherein coupling the low pass filter comprises disconnecting the first branch line.
  - 62. (New) The method of claim 59, wherein coupling the low pass filter

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comprises disposing a ferrite toroid substantially around the circumference of the first branch line.

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63. (New) The method of claim 59, wherein the power line communications repeater prevents data transmitted from the second subscriber premises from entering the first subscriber premises.